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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,377	12/31/2003	Peter Massaro	P0728.70010US00	4887
23628 7590 12/12/2007 WOLF GREENFIELD & SACKS, P.C. 600 ATLANTIC AVENUE BOSTON, MA 02210-2206			EXAMINER NAGPAUL, JYOTI	
			ART UNIT 1797	PAPER NUMBER
			MAIL DATE 12/12/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/750,377

Applicant(s)

MASSARO, PETER

Examiner

Jyoti Nagpaul

Art Unit

1797

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) 21-30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-20 and 31 is/are rejected.
- 7) ☒ Claim(s) 4 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of Claims 1-20 and 31 in the reply filed on October 5, 2007 is acknowledged. Claims 21-30 are withdrawn from consideration.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. **Claims 1 and 31** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant's recite, "the portion of the sample material being deposited ***without requiring*** a portion of the sample transfer means positioned adjacent the sample material to separate from the sample transfer means", it is unclear from the claim language if applicant's intend to claim that a portion of the sample transfer means is optionally not required to separate from the sample transfer means or is it definite that the portion of the sample transfer means is not separated from the sample transfer means. Clarification is needed.
3. **Claim 4** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have recited, "the layer of transparent material and the layer of opaque material are positioned adjacent to each other and the adjacent layers ***move*** in response to illumination from the illumination beam." Applicants are reciting apparatus claims. The only structure that is recited in the claim is that the

layers are positioned adjacent to each other. With respect to, "the adjacent layers move in response to illumination from the illumination beam", is a functional limitation and is of no patentable significance in apparatus claims. Examiner suggests that applicant's limit the **structure** of the apparatus.

4. **Claim 13** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants have recited, "the portion of the sample material separated from the sample transfer device by movement of at least a portion of the sample transfer device in response to being illuminated by the illumination beam". Again, applicants are reciting apparatus claims. This is a functional recitation and is of no patentable significance in apparatus claims. Examiner suggests that applicant's limit the **structure** of the apparatus.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. **Claims 1-3, 5-20 and 31** are rejected under 35 U.S.C. 102(b) as being anticipated by Hillenkamp (US 6423966).

Hillenkamp teaches an a sample depositing system comprising an illumination source (10) that forms an illumination beam, a sample transfer device (12 or 60) that

receives the illumination beam from the illumination source (10), a sample material (2) carried by the sample transfer device (12 or 60) and a controller (motor/XY) that causes the illumination source (10) to illuminate the sample transfer device (12 or 60) and thereby cause at least a portion of the sample material (2) carried by the sample transfer device (12 or 60) to be controllably separated from the transfer device (12 or 60) and deposited on a work surface/analysis instrument. Additionally, the portion of the sample material (2) is deposited without requiring a portion of the sample transfer device (12 or 60) positioned adjacent the sample material (2) to separate from the sample transfer device (12 or 60). The sample transfer device (12 or 60) further includes at least one layer of material (3) that is translucent or transparent to the illumination beam and at least one layer of a material (61) that is opaque to or substantially impedes transmission of the illumination beam. The sample material (2) is carried by the sample transfer device (12 or 60) on a side of the sample transfer device (12 or 60) opposite the illumination source (10). (See Figures 3A-8A) Further, a portion of sample material (2) is separated from the sample transfer device (12 or 60) in droplet form. The illumination source (10) includes a laser. It is inherent due to the illumination of the sample material that at least a portion of the sample material (2) is separated from the sample transfer device (12 or 60) by energy transfer from the illumination beam to the sample material (2). With respect to Claim 13, on page 8 of applicant's disclosure, applicants disclose that "the movement of the sample transfer device may be caused by uneven transfer rates of the first and second layers when heated by the illumination beam." Hillenkamp teaches an illumination beam and sample transfer

device comprising of two layers. Therefore, it is inherent that there may be movement of the sample transfer device due to uneven transfer rates of the layers when heated by the illumination beam. With respect to Claim 15, it is inherent that at least a portion of the sample material (2) is separated from the sample transfer device (12 or 60) by heating a portion of the sample material (2) by the illumination beam. The illumination beam will inherently give off heat. The sample transfer device (12 or 60) further includes a chamber (21) that communicated with an opening (22 or 43) and at least a portion of the sample material (2) is located in the chamber (21). The sample transfer device further includes at least one of a projection (42) and a cavity (21) constructed and arranged to aid in formation of a droplet of sample material (2). (See Figures 3A-8A) Furthermore, Hillenkamp teaches a substance that explodes or expands rapidly upon illumination by the illumination beam, explosion or expansion of the substance causing at least a portion of the sample material to be deposited on a work surface/analysis instrument.

Allowable Subject Matter

7. **Claim 4** would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. Prior art fails to teach wherein the layer of transparent material and the layer of opaque material are positioned adjacent to each other and the adjacent layers move in response to illumination from the illumination beam.

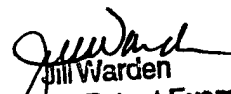
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jyoti Nagpaul whose telephone number is 571-272-1273. The examiner can normally be reached on Monday thru Friday (8:00-4:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JN


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